```
L31 ANSWER 1 OF 25
                         MEDLINE on STN
                                   MEDLINE <<LOGINID::20080306>>
ACCESSION NUMBER: 2006350431
DOCUMENT NUMBER:
                     PubMed ID: 16764118
                     [The role of cytokines in the induction of
                      labor, cervical ripening and rupture of
the fetal membranes].
                     Zur Rolle von Zytokinen bei Weheninduktion, Zervixreifung
                     und Blasensprung.
AUTHOR:
                     Winkler M; Rath W
CORPORATE SOURCE:
                     Frauenklinik für Gynakologie und Geburtshilfe der
                     Rheinisch-Westfalischen Technischen Hochschule (RWTH)
                     Aachen.
SOURCE:
                     Zeitschrift fur Geburtshilfe und Neonatologie, (1996) Vol.
                     200 Suppl 1, pp. 1-12. Ref: 81
Journal code: 9508901. ISSN: 0948-2393.
PUB. COUNTRY:
                     Germany: Germany, Federal Republic of
DOCUMENT TYPE:
                     (ENGLISH ABSTRACT)
                     Journal; Article; (JOURNAL ARTICLE)
                     General Review; (REVIEW)
LANGUAGE:
                     German
FILE SEGMENT:
                     Priority Journals
ENTRY MONTH:
                     200608
ENTRY DATE:
                     Entered STN: 13 Jun 2006
                     Last Updated on STN: 3 Aug 2006
                     Entered Medline: 2 Aug 2006
     Even today prematurity is the major cause of perinatal mortality.
     Prematurity has multiple causes. There is a growing body of evidence
     supporting the association between silent intrauterine infection and
     preterm birth. Bacterial products may activate macrophages ubiquitous
     present in the decidua, placenta and fetal membranes. These cells after
     activation secrete a large variety of mediators including tumour necrosis
     factor alpha (TNFalpha) and interleukin (IL)-1. Besides these cytokines
     IL-2, IL-3, IL-4, IL-6, IL-8, IL-10, epidermal growth factor,
     granulocyte-colony stimulating factor and transforming growth factor beta
     have been identified in intrauterine tissues and in the amniotic fluid.
     The majority of these substances (TNFalpha, IL-1, IL-2, IL-3, IL-6) can
     stimulate the prostaglandin-biosynthesis by intrauterine tissues (amnion,
     chorion, decidua), some of them have antiinflammatory effects (IL-10,
     transforming growth factor alpha). These effects are mediated by
     receptors on the target cells; specific receptor antagonists (for example
     for IL-1) were found in high concentrations in amniotic fluid during
     normal pregnancy. This cytokine network is in a sensitive balance and
     probably associated with an uncomplicated course of pregnancy. Systemic
     or localized infections as well as tissue injury initiate the
     induction of the prostaglandin synthesis cascade thus leading to
     pregnancy loss via augmented cytokine secretion. Furthermore, cytokines
     may be involved in the regulation of preterm and term cervical
     ripening. The changes in mechanical properties of the cervix are associated with a reduction of collagen content and alterations in the
     glycosaminoglycan pattern within the cervical
extracellular matrix. IL-1 can stimulate the synthesis of collagenases,
     and IL-8 may play an important role in the regulation of the invasion of
     neutrophilic granulocytes into the <u>cervical</u> stroma with subsequent degranulation and release of proteases. The
     cytokine-stimulated collagenase production in the fetal membranes is
     responsible for the reduction of their tensile strength and may be
     associated with rupture of the membranes. The cytokine network seems to
     be a sensitive regulation system. Disturbances of its balance by
     environmental (e.g. infection) or intrauterine influences (e.g. extension
     by the fetus) may lead to termination of pregnancy.
L31 ANSWER 2 OF 25
                         MEDLINE on STN
ACCESSION NUMBER:
                    96260325 MEDLINE <<LOGINID::20080306>>
DOCUMENT NUMBER:
                     PubMed ID: 8778003
```

[The biochemical mechanism of <u>cervical</u> ripening after intracervical application of PGE2].
Blochemiczny mechanizm procesu doirzewania szyjki macicy ciezarnej po miejscowym zastosowaniu prostaglandyny E2.
Rechberber T; Postawski K; Skorupski P; Czarnacki J;

II Kliniki Ginekologii Operacyjnej AM w Lublinie.

Jakowicki J

CORPORATE SOURCE:

SOURCE: Ginekologia polska, (1995 Sep) Vol. 66, No. 9, pp. 492-7.

Journal code: 0374641. ISSN: 0017-0011.

DOCUMENT TYPE: (CLINICAL TRIAL)

(ENGLISH ABSTRACT)

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: Polish

Priority Journals FILE SEGMENT:

ENTRY MONTH: 199609 ENTRY DATE:

Entered STN: 24 Sep 1996 Last Updated on STN: 24 Sep 1996

Entered Medline: 17 Sep 1996

The influence of local intracervical application of PGE2 (Prostin E2-Upjohn) on collagenolytic activity as well as extracellular matrix components of human cervix during parturition has been analyzed. The content and extractability of collagen as well as concentration of glycosaminoglycans and hyaluronic acid were investigated. Since we did not find any statistical changes in DNP-peptide collagenolytic

activity and investigated extracellular macromolecules of cervice connective tissue we presumed that cervical ripening after local prostaglandin application closely resembles that occurring spontaneously.

L31 ANSWER 3 OF 25 MEDLINE on STN

ACCESSION NUMBER: 95150947 MEDLINE <<LOGINID::20080306>>

DOCUMENT NUMBER: PubMed ID: 7848214 Prostaglandins and biological control of cervical

AUTHOR: Calder A A CORPORATE SOURCE: Department of Obstetrics and Gynaecology, Centre for

Reproductive Biology, University of Edinburgh, United Kingdom. The Australian & New Zealand journal of obstetrics &

gynaecology, (1994 Jun) Vol. 34, No. 3, pp. 347-51. Ref:

Journal code: 0001027. ISSN: 0004-8666.

PUB. COUNTRY: Australia

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW) LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH:

ENTRY DATE: Entered STN: 16 Mar 1995 Last Updated on STN: 16 Mar 1995

Entered Medline: 9 Mar 1995

The uterine <u>cervix</u> is a vital structure for the success of pregnancy. It must remain firmly closed to contain the developing conceptus within the uterus until the fetus has grown to a stage of maturity appropriate for extra-uterine survival. During the birth process itself, the cervix must undergo the rapid opening known as dilatation to allow the fetus to travel through the birth canal with a minimum of stress and trauma. The process of cervical dilatation must be preceded by the phenomenon of effacement whereby the substance of the cervix shortens and thins out. Both effacement and dilatation would be impossible unless the dense fibrous connective tissue of the cervix had undergone a radical modification. Cervical ripening requires a change of the collagen within the cervical stroma from a highly organised network of tightly bound collagen fibrils to a much looser arrangement whereby the tissue becomes more compliant. This is associated with profound changes in the

composition of the ground substance of the  $\underline{\text{cervical}}$  stroma with an alteration in the concentration and type of  $\underline{\text{glycosaminoglycans}}$ (GAGs) which constitute the proteoglycan complexes. It was formerly assumed that these changes were under the control of those cellular elements within the <u>cervical</u> stroma (fibroblasts and smooth muscle cells) but it seems quite possible that the ripening process is associated with an infiltration of inflammatory cells especially neutrophils. Currently much interest is centering on the possible role of cytokines such as interleukin-8 and there may also be a role in cervical ripening for leukotrienes.(ABSTRACT TRUNCATED AT 250

```
ACCESSION NUMBER:
                      94050971
                                     MEDITNE <<LOGINID::20080306>>
DOCUMENT NUMBER:
                      PubMed ID: 8233252
                       Prostaglandin E2-induced ripening of the human
                       cervix involves changes in proteoglycan metabolism.
                       Norman M; Ekman G; Malmstrom A
CORPORATE SOURCE:
                      Department of Obstetrics and Gynecology, Karolinska
                       Institutet, Danderyd Hospital, Sweden.
                       Obstetrics and gynecology, (1993 Dec) Vol. 82, No. 6, pp.
                       Journal code: 0401101. ISSN: 0029-7844.
                      United States
DOCUMENT TYPE:
                       Journal; Article; (JOURNAL ARTICLE)
                       (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE:
                      English
                      Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH:
ENTRY DATE:
                      Entered STN: 17 Jan 1994
                       Last Updated on STN: 17 Jan 1994
                      Entered Medline: 21 Dec 1993
     OBJECTIVE: To elucidate how prostaglandin E2 (PGE2) induces
     cervical ripening. METHODS: Cervical biopsies were obtained immediately postpartum from women successfully treated with PGE2
     gel intracervically. Six specimens were incubated with [358] sulfate and
     five were used to characterize the nonlabeled proteoglycan composition.
     In separate experiments, biopsy specimens from three term pregnant women
     with unripe <u>cervices</u> were incubated with PGE2 in organ cultures.

Proteoglycans were isolated and characterized using ion-exchange and gel
     chromatography and sodium dodecyl sulfate-polyacrylamide gel
     electrophoresis. RESULTS: During PGE2-induced cervica
     ripening, the synthesis of proteoglycans, especially a large chondroitin/
     dermatan sulfate proteoglycan and biglycan, increased three- to sixfold. This resulted in a net increase in the large proteoglycan in the
     PGE2-treated cervices. In organ culture, on the contrary, incubation with PGE2 decreased the proteoglycan synthesis. CONCLUSION:
     Prostaglandin E2-induced cervical ripening is accomplished by increased remodeling of the cervical connective
     tissue, involving changed proteoglycan metabolism and composition.
L31 ANSWER 5 OF 25
                           MEDLINE on STN
ACCESSION NUMBER:
                     92135112
                                    MEDLINE <<LOGINID::20080306>>
DOCUMENT NUMBER:
                      PubMed ID: 1777452
                       Insufficient remodelling of the uterine connective tissue
                      in women with protracted labour. Granstrom L; Ekman G; Malmstrom .
AUTHOR:
CORPORATE SOURCE:
                      Department of Obstetrics and Gynaecology, Karolinska
                       Institutet, Danderyd Hospital, Sweden.
                       British journal of obstetrics and gynaecology, (1991 Dec)
                      Vol. 98, No. 12, pp. 1212-6.
                       Journal code: 7503752. ISSN: 0306-5456.
PUB. COUNTRY:
                      ENGLAND: United Kingdom
DOCUMENT TYPE:
                      Journal; Article; (JOURNAL ARTICLE)
                       (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE:
                      English
FILE SEGMENT:
                      Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH:
                       199203
ENTRY DATE:
                       Entered STN: 29 Mar 1992
                       Last Updated on STN: 29 Mar 1992
                      Entered Medline: 10 Mar 1992
AB
     OBJECTIVE-To investigate the association between a slow progress of
      labour and insufficient remodelling of the uterine connective
     tissue. DESIGN--An open comparative study. SETTING--Danderyd Hospital,
     Department of Obstetrics and Gynaecology, referral centre.
     SUBJECTS--Eleven women (study group) in oxytocin augmented <u>labour</u>
     but with an unripe cervix in whom vaginal delivery could not be accomplished and 12 women (normal labour group) in normally progressing spontaneous labour and a favourable cervix
     but who needed to be delivered by caesarean section due to signs of fetal
     distress. INTERVENTIONS-At caesarean section tissue specimens were
     obtained from the fundus, the isthmus and the cervix uteri.
     MAIN OUTCOME MEASURES-Collagen concentration and extractability,
     collagenolytic activity expressed as DNP-peptide hydrolytic activity and
```

## 10500284

```
the concentrations of sulphated <u>qlycosaminoglycans</u> (S-GAG) and hyaluronic acid (HA) in the tissue specimens. RESULTS--Statistically
      significantly higher concentrations and lower extractability of collagen
      in the isthmus and the <u>cervix</u> uteri was found in women with slow progress of <u>labour</u> compared with those with normal <u>labour</u>. CONCIUSIONS—An insufficient remodelling of the
      connective tissue in the cervix and isthmus uteri may contribute
      to slow progress of labour.
L31 ANSWER 6 OF 25
                               MEDLINE on STN
ACCESSION NUMBER: 92123938
                                          MEDLINE <<LOGINID::20080306>>
DOCUMENT NUMBER:
                          PubMed ID: 1663255
                           Induction of <u>labor</u> and <u>cervica</u>
                          maturation using mifepristone (RU 486) in the late pregnant
                          rat. Influence of a cyclooxygenase inhibitor (Diclofenac).
AUTHOR:
                          Cabrol D; Carbonne B; Bienkiewicz A; Dallot E; Alj A E;
                          Cedard I
                          INSERM U 166, Paris, France.
Prostaglandins, (1991 Jul) Vol. 42, No. 1, pp. 71-9.
CORPORATE SOURCE:
                          Journal code: 0320271. ISSN: 0090-6980.
                          United States
DOCUMENT TYPE:
                          (COMPARATIVE STUDY)
                          Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:
                          English
FILE SEGMENT:
                          Priority Journals
ENTRY MONTH:
                          199202
ENTRY DATE:
                          Entered STN: 15 Mar 1992
                          Last Updated on STN: 15 Mar 1992
                          Entered Medline: 25 Feb 1992
      The mechanism of action of RU 486 (Mifepristone), an antiprogesterone
      compound, on <u>labor induction</u> and on <u>cervical</u> maturation, is still not well documented. We have investigated the effect
      of RU 486, alone and in association with a cyclooxygenase inhibitor
      On a 100, Elvies and in association with a Systemsystems inhibitor (Dhelofense) on the induction of preterm delivery and on concomitant changes in the distribution of cervical glycoseminoglycans (GAGS) in pregnant Wistar rats: a control group (n = 18), a RU 486 treated group (n = 36), and a RU 486 and Diclofenac
      treated group (n = 15). The results of this study confirm the ability of
      this antiprogesterone treatment to <u>induce</u> preterm delivery in the rat. This effect was antagonized by cyclooxygenase inhibition,
      suggesting that the action of RU 486 on \underline{\text{labor}} induction could be mediated by prostaglandins. The absence of an increase in plasma
      prostaglandin E2 (PGE2) levels in RU 486 treated animals could be
      explained by local uterine changes in prostaglandin concentrations.
      Mifepristone also induced some of the biochemical features of cervical maturation (i.e. increased hydration and hyaluronic acid
      concentration). This effect was not inhibited in Diclofenac treated
      animals suggesting that factors other than prostaglandins play a role in
      this phenomenon.
L31 ANSWER 7 OF 25
                              MEDLINE on STN
                                          MEDLINE <<LOGINID::20080306>>
ACCESSION NUMBER: 91112348
DOCUMENT NUMBER:
                          PubMed ID: 2535030
                          Cervical connective tissue in relation to
                          pregnancy, labour, and treatment with prostaglandin E2.
AUTHOR:
                          Uldbjerg N
CORPORATE SOURCE:
                          Department of Obstetrics and Gynecology, University of
                          Aarhus, Denmark.
                          Acta obstetricia et gynecologica Scandinavica. Supplement,
                          (1989) Vol. 148, pp. 1-40.
                          Journal code: 0337655. ISSN: 0300-8835.
PUB. COUNTRY:
                          Sweden
DOCUMENT TYPE:
                          (IN VITEO)
                          Journal; Article; (JOURNAL ARTICLE)
                          (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE:
                          English
                          Priority Journals
                          199102
ENTRY DATE:
                          Entered STN: 29 Mar 1991
```

Last Updated on STN: 29 Mar 1991 Entered Medline: 27 Feb 1991

```
5 MEDLINE on STN
91106652 MEDLINE <<LOGINID::20080306>>
L31 ANSWER 8 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
                      PubMed ID: 2272430
                       [Principles of physiologic and drug-induced
                       cervix ripening--recent morphologic and biochemical
                      Grundlagen der physiologischen und medikamentos induzierten
                       Zervixreifung-Neuere morphologische und biochemische
                       Befunde.
AUTHOR:
                       Rath W; Osmers R; Adelmann-Grill B C; Stuhlsatz H W;
                       Tschesche H; Szeverini M
CORPORATE SOURCE:
                      Univ.-Frauenklinik Gottingen.
                      Geburtshilfe und Frauenheilkunde, (1990 Sep) Vol. 50, No.
                       9, pp. 657-64. Ref: 47
                       Journal code: 0370732. ISSN: 0016-5751.
PUB. COUNTRY:
                      GERMANY: Germany, Federal Republic of
DOCUMENT TYPE:
                      (ENGLISH ABSTRACT)
                       Journal; Article; (JOURNAL ARTICLE)
                      General Review; (REVIEW)
LANGUAGE:
                      German
FILE SEGMENT:
                      Priority Journals
ENTRY MONTH:
                       199102
ENTRY DATE:
                      Entered STN: 29 Mar 1991
                       Last Updated on STN: 29 Mar 1991
                      Entered Medline: 25 Feb 1991
     Maturation of the cervix during pregnancy is an essential
      pre-requisite for an uncomplicated delivery at term. Physiological
          ical ripening is characterised by a diffuse loosening of the
      collagenous connective tissue with widely scattered collagen fibrils and
      an increased amount of extracellular ground substance. These
      morphological changes are similar to those after prostaglandin
      (PG)-pre-treatment of the cervix. The local application of PG leads to a marked mulifocal loosening of the collagen fibre bundles with
      "activated" fibroblasts, characterised by a fine granular loosening of the
      cytoplasm, vacuolised enlarged mitochondria and an increased number of
      cytoplasmatic vesicles close to the cell surface. In the course of
     pregnancy the volume of the <u>oervix</u> increases by a significant rise in synthesis of collagen, protein, <u>alyoosaminoglycan</u> and fibronectin. The change in consistency during late pregnancy corresponds
      to a significant decrease in <u>dermatan</u> sulphate coninciding with a marked increase in hyaluronic acid concentration associated with
      increased water uptake. Contrary to the already published literature,
      enzymatic collagen degradation does not play an important role in
      physiological <u>cervical</u> maturation. The action of catabolic
      enzymes (collagenases, glycosidases), liberated from polymorphonuclear
      leukocytes invading the extracellular matrix, is responsible for the rapid
      dilatation of the cervix at parturition. This process is
      limited by the immediate postpartum insudation of the <a href="cervix">cervix</a> by plasma containing highly potent proteinase inhibitors <a href="(e.g. alpha">(e.g. alpha</a>
      2-macroglobulin). PG-induced cervical ripening is associated with a time-limited enzymatic collagen degradation, an
      increased synthesis of non-collagenous proteins and a significant increase
      in hyaluronic acid concentration. Our basic biochemical findings in
      cervical ripening and dilatation during parturition may greatly
      contribute to the development of new concepts in the causal treatment of
      cervical pathology during pregnancy.
L31 ANSWER 9 OF 25
                           MEDLINE on STN
ACCESSION NUMBER:
                      90074573
                                     MEDLINE <<LOGINID::20080306>>
DOCUMENT NUMBER:
                      PubMed ID: 2590655
                      Changes in the connective tissue of corpus and
                       cervix uteri during ripening and labour
                       in term pregnancy.
                      Granstrom L; Ekman G; Ulmsten U; Malmstrom A
CORPORATE SOURCE:
                      Department of Obstetrics and Gynecology, Karolinska
                       Institutet, Danderyd Hospital, Stockholm, Sweden.
                      British journal of obstetrics and gynaecology, (1989 Oct)
                      Vol. 96, No. 10, pp. 1198-202.
                      Journal code: 7503752. ISSN: 0306-5456.
PUB. COUNTRY:
                      ENGLAND: United Kingdom
```

Journal; Article; (JOURNAL ARTICLE)

DOCUMENT TYPE:

(RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 199001

ENTRY DATE:

Entered STN: 28 Mar 1990 Last Updated on STN: 28 Mar 1990

Entered Medline: 22 Jan 1990

The composition of the connective tissue of human  $\underline{\operatorname{cervix}}$  and corpus uteri was studied in tissue specimens from seven nonpregnant women

and 14 pregnant women, delivered at term by section, to examine

and 14 pregnant women, destroyed at term of section, to spontaneous cervical ripening and labour-induced changes in both the uterine and the cervical connective tissue. The main finding in both the cervix and the

corpus was a large (40-60%) decrease of the collagen concentration. The collagen extractability, obtained by pepsin digestion, was increased

twofold, suggesting a change of the organization of the collagen fibrils. This reorganization process could also be demonstrated by a large increase of the collagenolytic activity demonstrated with an artificial DNP-peptide substrate. The concentrations of sulphated glycosaminoglycans was lower in pregnant women than in non-pregnant women. The results show

that both the cervix and the corpus uteri contain substantial amounts of connective tissue components (collagen, sulphated

glycosaminoglycans and hyaluronic acid) and that during ripening, reconstruction of the connective tissue components occurs in both sites. This indicates that the cervical state reflects that of the

MEDLINE on STN L31 ANSWER 10 OF 25

79101650 ACCESSION NUMBER: MEDLINE <<LOGINID::20080306>>

DOCUMENT NUMBER: PubMed ID: 367195

[Cervical dilatation and its clinical significance in women with pathological pregnancy].

Po vuprosa za tservikalnata dilatatsiia i neinoto klinichno

znachenie pri zheni s patologichna bremennost. Penev T

AUTHOR: SOURCE: Akusherstvo i ginekologii a, (1978) Vol. 17, No. 6, pp.

384-91. Ref: 79 Journal code: 0370455. ISSN: 0324-0959.

PUB. COUNTRY: Bulgaria

myometrium.

DOCUMENT TYPE: (ENGLISH ABSTRACT) Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE: Bulgarian

FILE SEGMENT: Priority Journals ENTRY MONTH: 197903

ENTRY DATE: Entered STN: 15 Mar 1990

Last Updated on STN: 15 Mar 1990

Entered Medline: 24 Mar 1979

MEDLINE on STN L31 ANSWER 11 OF 25 ACCESSION NUMBER: 78233852

MEDLINE <<LOGINID::20080306>> DOCUMENT NUMBER: PubMed ID: 615515

Changes in  $\underline{\text{cervical}}$  function at parturition. Fitzpatrick  $\overline{R}$  JAUTHOR:

SOURCE: Annales de recherches veterinaires. Annals of veterinary

research, (1977) Vol. 8, No. 4, pp. 438-49. Journal code: 1267230. ISSN: 0003-4193.

France

PUB. COUNTRY: DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197809

ENTRY DATE: Entered STN: 14 Mar 1990

Last Updated on STN: 3 Feb 1997 Entered Medline: 15 Sep 1978

In sheep and goats changes in the wall of the uterine cervix associated with parturition were studied in relation to the preparturient sequence of endocrine events. Evidence was obtained of separation of collagen fibrils, possibly due to changes in the electrostatic binding of the fibrils by glycosaminoglycans. The mechanical properties of the  $\underline{\operatorname{cervix}}$  were investigated quantitatively on isolated tissues by radial loading to destruction, and by progressive extension on a

## 10500284

```
tensometer; the extension experiments revealed that at parturition (but
     not before) the <u>cervical</u> wall acts mechanically as if composed
     of two different tissues, one of which, the collagen layer, changes
     profoundly at parturition to facilitate dilatation. Resistance to
     dilatation (compliance) was investigated in vivo using indwelling
     intracervical balloons which could be inflated with water at standard
     speed. This permitted serial observations in the same animal during the
     progress of parturition induced with foetal dexamethasone
     (sheep) or maternal cloprostenol (goats). Compliance increased
     progressively in all 13 parturient animals, but not in untreated controls,
     and this increase occurred coincidentally with the expected fall in
     progesterone and rise in oestrogen concentrations: it occurred before the
     preparturient rise in PGF. Meclofenamic acid administration to
     cloprostenol treated goats successfully delayed the PGF surge and delayed
     parturition but did not delay the increase in compliance which reached
     maximum within the 36 hours of treatment with the PG synthetase inhibitor.
L31 ANSWER 12 OF 25
                        MEDLINE on STN
ACCESSION NUMBER:
                                 MEDLINE <<LOGINID::20080306>>
DOCUMENT NUMBER:
                    PubMed ID: 318871
AUTHOR:
                    Liggins G C; Forster C S; Grieves S A; Schwartz A L
                    Biology of reproduction, (1977 Feb) Vol. 16, No. 1, pp.
                    39-56. Ref: 106
                    Journal code: 0207224. ISSN: 0006-3363.
                    United States
DOCUMENT TYPE:
                    Journal; Article; (JOURNAL ARTICLE)
                    General Review; (REVIEW)
LANGUAGE:
                    English
                    Priority Journals
FILE SEGMENT:
ENTRY MONTH:
                    197703
ENTRY DATE:
                    Entered STN: 13 Mar 1990
                    Last Updated on STN: 13 Mar 1990
                    Entered Medline: 31 Mar 1977
L31 ANSWER 13 OF 25 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER:
                   2007156267 EMBASE <<LOGINID::20080306>>
                    Current principles of the diagnosis and treatment of
                    preterm delivery.
AUTHOR:
                    Zimmer M.; Pomorski M.; Wiatrowski A.; Fuchs T.; Woyton J.
CORPORATE SOURCE:
                    M. Zimmer, Department of Human Reproduction and Obstetrics,
                    Silesian Piasts University of Medicine, Dyrekcyjna 5/7,
                    50-526 Wroclaw, Poland
SOURCE:
                    Advances in Clinical and Experimental Medicine, (2007) Vol.
                    16, No. 1, pp. 155-164.
                    Refs: 40
                    ISSN: 1230-025X CODEN: ACEMC6
DOCUMENT TYPE:
                    Journal; General Review; (Review)
                            Obstetrics and Gynecology
                            Clinical and Experimental Pharmacology
                            Drug Literature Index
                            Adverse Reactions Titles
                            Toxicology
                            Pediatrics and Pediatric Surgery
LANGUAGE:
                    English
SUMMARY LANGUAGE:
                    English; Polish
ENTRY DATE:
                    Entered STN: 26 Apr 2007
                    Last Updated on STN: 26 Apr 2007
     Preterm delivery is one of the main causes of infant mortality in
     developed countries, and infants who survive require long-term
     rehabilitation. Therefore it is important to understand the causes of
     preterm delivery and perform an adequate and early selection of women at
     risk. This enables surrounding them with intensive supervision and
     education guided towards prevention and early detection of symptoms of
     preterm contractions. According to current knowledge, effective
     prophylaxis of preterm delivery is connected with screening and treatment
     of asymptomatic bacteriuria in all pregnant women, progestogen
     administration, and screening for and treatment of asymptomatic bacterial
     vaginosis in the group at high risk. In the group at high risk,
     additional actions are necessary: fibronectin marker in cervical
```

-vaginal smear, regular ultrasonographic evaluation of cervix length, and, in case of its shortening, the use of cervical cerclage and examination for the presence of autoantibodies. Treatment of the threat of preterm delivery consists of assuring the patient's peace and using drugs to restrain contractions. Inefficiency of such treatment is connected with the necessity of administering glucocorticosteroids and determining a way of labor termination that will guarantee maximum protection of the fetus. .COPYRGT. Copyright by Silesian Piasts University of Medicine in Wroclaw.

L31 ANSWER 14 OF 25 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER:

2007050476 EMBASE <<LOGINID::20080306>>

AUTHOR:

Kawasaki disease with coronary artery sequelae. Hibbard J.U.; Fajardo J.E.; Briller J.

Dr. J.U. Hibbard, University of Illinois at Chicago,

CORPORATE SOURCE:

Department of Obstetrics and Gynecology, M/C 808, 820 South

Wood Street, Chicago, IL 60612, United States.

jhibbar@uic.edu

Obstetrics and Gynecology, (Feb 2007) Vol. 109, No. 2 PART 2 SUPPL., pp. 517-519.

Refs: 8

TSSN: 0029-7844 CODEN: OBGNAS

PUBLISHER IDENT .:

0000625020070200100015 United Kingdom

DOCUMENT TYPE:

Journal; Article

Obstetrics and Gynecology Cardiovascular Diseases and Cardiovascular Surgery

025 Hematology

Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE:

Entered STN: 13 Feb 2007

Last Updated on STN: 13 Feb 2007

BACKGROUND: Kawasaki disease is an acute febrile illness characterized by mucosal inflammation, skin rash, and cervical lymphadenopathy, with potential for cardiac sequelae, including coronary aneurysms with subsequent thrombosis, infarction, and death. Pregnancy in affected women presents multiple maternal risks. CASE: A woman with Kawasaki disease complicated by coronary aneurysms underwent two consecutive pregnancies without further difficulty. She was maintained on therapeutic enoxaparin, alpha-methyldopa, and labetalol, with labor induction, passive second stage, and continued anticoagulation for 6 weeks postpartum. During gestations she was assessed with echocardiography, electrocardiography, and cardiac event monitor and managed by a maternal-fetal medicine and cardiology team. CONCLUSION: Kawasaki disease with coronary aneurysms presents challenges for obstetric management; obstetricians should be familiar with the disease, implications, and management in pregnancy. . COPYRGT. 2007 The American College of Obstetricians and Gynecologists.

L31 ANSWER 15 OF 25 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER:

2004223222 EMBASE <<LOGINID::20080306>> [Biochemistry of cervical ripening and

dilatation).

BIOCHEMIE DER ZERVIXREIFUNG UND MUTTERMUNDSEROFFNUNG.

AUTHOR: Rath W.; Bartz C.

CORPORATE SOURCE: Dr. W. Rath, Klin. fur Gynakologie/Geburtshilfe, Universitatsklinikum Aachen, Pauwelsstrasse 30, 52074 Aachen, Germany, wrath@ukaachen.de

Gynakologe, (Apr 2004) Vol. 37, No. 4, pp. 314-320.

Refs: 38

ISSN: 0017-5994 CODEN: GYNKAP COUNTRY: Germany

DOCUMENT TYPE: Journal; General Review; (Review) FILE SEGMENT: Obstetrics and Gynecology Physiology

LANGUAGE: German

SUMMARY LANGUAGE: English; German

ENTRY DATE: Entered STN: 10 Jun 2004

Last Updated on STN: 10 Jun 2004

The blochemical mechanisms of cervical ripening and its regulation are yet not fully understood. The cervical ripening phase, which begin 4 weeks prior to the delivery (up to a cervical dilatation of 2-3 cm), is characterized by acatabolic metabolism of proteoglycans and glycosaminoglycans, mainly by a dramatic increase in the hyaluronan concentration associated with increased water uptake and by a significant reduction of collagen concentration within the extracellular matrix. These catabolic transformation processes of the cervix are regulated via cervical fibroblasts by steroid hormones, prostaglandin E(2), cytokines and the NO system. The role of neutrophils and macrophages, which are accumulated in and around cervical vessels at that time, still remains unclear. The cervical dilatation during parturition has been compared to an inflammatory reaction and is characterized by migration, infiltration and degranulation of neutrophils with subsequent release of proteases and collagenases and enzymatic degradation of fundamental matrix proteins, in particular collagen. The increased synthesis of cytokines, in particular  $IL-1\beta$  and IL-8, and the increased expression of vascular endothelial adhesion molecules play a crucial role in these processes. Recent findings from biochemical research may give new insights in the mechanisms of physiological <u>cervical</u> ripening and "artificial" <u>cervical</u> ripening at <u>induction</u> of <u>labor</u> and <u>may also contribute to the development of more promising approaches in the contribute to the development of more promising approaches in the</u> diagnosis and treatment of prematurity. L31 ANSWER 16 OF 25 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN ACCESSION NUMBER: 2003494195 EMBASE <<LOGINID::20080306>> Spinal cord injury caused by gunshot wound during pregnancy. AUTHOR: Gencosmanoglu B.E.; Hanci M.; Yucesoy G.; Madazli R.; Yilmaz H.; Ozgen M. Dr. M. Hanci, University of Istanbul, Cerrahpasa Medical CORPORATE SOURCE: School, Department of Neurosurgery, P.O. Box 792, Sisli 80220, Istanbul, Turkey. murath@istanbul.edu.tr SOURCE: Journal of Spinal Cord Medicine, (Jun 2001) Vol. 24, No. 2, pp. 123-126. Refs: 25 ISSN: 1079-0268 CODEN: JSCMC3 United States DOCUMENT TYPE: Journal; Article FILE SEGMENT: Obstetrics and Gynecology 024 Anesthesiology Drug Literature Index Adverse Reactions Titles Neurology and Neurosurgery LANGUAGE: English SUMMARY LANGUAGE: English ENTRY DATE: Entered STN: 5 Jan 2004 Last Updated on STN: 5 Jan 2004 AB We report a case of a pregnant woman with acute spinal cord injury (C5) caused by gunshot wound and discuss the respective maternal and fetal considerations. Neither decompressive surgery nor corticosteroid protocols were used. At 37 weeks, the patient delivered a normal female infant after induction of labor and epidural anesthesia, with no medical or obstetrical complications. With conservative management and rehabilitation, this patient had significant recovery of function. L31 ANSWER 17 OF 25 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN ACCESSION NUMBER: 2003490922 EMBASE <<LOGINID::20080306>> Spontaneous delivery through perineum, bypassing the vaginal introitus. AUTHOR: Tahseen S.; Mclean G. CORPORATE SOURCE: Dr. S. Tahseen, 39 Sukey Way, Bowthorpe, Norwich NR5 9NZ, United Kingdom. drtahseen@hotmail.com Journal of Obstetrics and Gynaecology, (Nov 2003) Vol. 23, No. 6, pp. 671-672.

Refs: 5

United Kingdom

ISSN: 0144-3615 CODEN: JOGYDW

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 010 Obstetrics and Gynecology

Drug Literature Index

LANGUAGE: English ENTRY DATE:

Entered STN: 5 Jan 2004 Last Updated on STN: 5 Jan 2004

L31 ANSWER 18 OF 25 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003429937 EMBASE <<LOGINID::20080306>>

Antalya consensus on perinatal care: The report of the 2(nd) World Congress of Perinatal Medicine for Developing

Countries, 1-5 October 2002, Antalya, Turkey.

AUTHOR: Sen C.; Yayla M.; Levene M.

CORPORATE SOURCE: Dr. C. Sen, University of Istanbul, Cerrahpasa Medical School, Dept. Perinatol., Obstet./Gynecol., PO Box:33,

Cerrahpasa Istanbul-34301, Turkey. csen@obusq.org.tr Journal of Perinatal Medicine, (2003) Vol. 31, No. 5, pp.

361-372.

ISSN: 0300-5577 CODEN: JPEMAO Germany

DOCUMENT TYPE: Journal; Conference Article; (Conference paper)

FILE SEGMENT: Obstetrics and Gynecology Public Health, Social Medicine and Epidemiology

Pediatrics and Pediatric Surgery

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 13 Nov 2003

Last Updated on STN: 13 Nov 2003

The goal of antenatal care is to help the mother to maintain her well-being and achieve a healthy outcome for herself and her infant. Education about pregnancy, childbearing and childrearing is an important part of antenatal care. Because of the perception that pregnancy is a physiologic event, even today lots of women do not seek medical care until a problem occurs during their pregnancy. There are still unacceptable differences in the extent of perinatal problems in developed and developing countries. Over the last century almost all countries have accepted antenatal care principles. However, insufficiency of resources and a lack of women's compliance have proved to be obstacles in developing countries and have compelled the application of various standard programs. Unfortunately, these programs are not sufficiently effective in preventing and treating maternal mortality. A safe pregnancy and delivery is a human right. Maternal mortality and morbidity should not be ranked with other diseases, because child bearing is not a disease. For this reason a global ethical consideration imposes an obligation upon society to avoid these almost totally preventable deaths. Ensuring access to family planning is an important way of decreasing maternal death. Maternal morbidity and mortality as well as perinatal mortality can be reduced through the synergistic effect of combined interventions, without first attaining high levels of economic development. These interventions include: education for all, universal childbirth, access to family planning services, attendance at birth by professional health workers, access to good quality care in case of complications, and policies that raise women's social and economic status and increase their access to property and the <u>labor</u> force.

L31 ANSWER 19 OF 25 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights

reserved on STN

ACCESSION NUMBER: 2002042279 EMBASE <<LOGINID::20080306>>

Misoprostol - For <u>cervical</u> ripening?. AUTHOR: Ginath S.; Zakut H.V.

CORPORATE SOURCE:

S. Ginath, Sackler Faculty of Medicine, Edith Wolfson Medical Center, Tel-Aviv University, P.O. Box 5, Holon

58100, Israel. ginath@post.tau.ac.il

European Journal of Obstetrics Gynecology and Reproductive SOURCE:

Biology, (1 Dec 2001) Vol. 99, No. 2, pp. 152-153.

Refs: 30

ISSN: 0301-2115 CODEN: EOGRAL

PUBLISHER IDENT .:

Ireland

DOCUMENT TYPE: Journal; General Review; (Review) FILE SEGMENT: Obstetrics and Gynecology

```
Drug Literature Index
LANGUAGE:
                    English
ENTRY DATE:
                    Entered STN: 7 Feb 2002
                    Last Updated on STN: 7 Feb 2002
L31 ANSWER 20 OF 25 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER: 2000103321 EMBASE <<LOGINID::20080306>>
                    Questions and answers from the F.I.X. Geriatric
                    prescribing; vancomycin peaks; adenosine stability;
                    dalteparin in pediatrics; cervical ripening with
                    misoprostol.
AUTHOR:
                    Cada D.J.; Russic M.; Pate K.; Unrub W.; Kay; Hulvey J.;
                    Generali J.; Burns K.; Oertel M.; Whitton K.; Reeves J.;
                    McFarland K.; Schlom E.
CORPORATE SOURCE:
                    hospitalpharmacy@drugfacts.com
                    Hospital Pharmacy, (1999) Vol. 34, No. 11, pp. 1291-1294.
                    ISSN: 0018-5787 CODEN: HOPHAZ
                    United States
DOCUMENT TYPE:
                    Journal; (Short Survey)
FILE SEGMENT:
                            Drug Literature Index
                    039
LANGUAGE:
                    English
ENTRY DATE:
                    Entered STN: 6 Apr 2000
                    Last Updated on STN: 6 Apr 2000
L31 ANSWER 21 OF 25 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER:
                  1993168772 EMBASE <<LOGINID::20080306>>
                    A physician's prerogative to prescribe drugs for off-label
                    uses during pregnancy.
                    Rayburn W.F.
AUTHOR:
CORPORATE SOURCE:
                    Dr. W.F. Rayburn, Department of Obstetrics/Gynecology,
                    Univ. Oklahoma Health Scis. Center, P.O. Box 26901-4SP701,
                    Oklahoma City, OK 73190, United States
                    Obstetrics and Gynecology, (1993) Vol. 81, No. 6, pp.
                    ISSN: 0029-7844 CODEN: OBGNAS
                    United States
DOCUMENT TYPE:
                    Journal; (Short Survey)
                            Obstetrics and Gynecology
                            Public Health, Social Medicine and Epidemiology
                            Clinical and Experimental Pharmacology
                            Drug Literature Index
                    006
                            Internal Medicine
LANGUAGE:
                    English
SUMMARY LANGUAGE:
                   English
ENTRY DATE:
                    Entered STN: 11 Jul 1993
                    Last Updated on STN: 11 Jul 1993
AB Physicians frequently prescribe drugs for indications other than those on
     the product label. Reasons for such off-label use during pregnancy
     include: prevention of repetitive abortion, inhibition of premature
     labor, reduction of fetal or neonatal infection, reduction in
     development of preeclampsia and its complications, and ripening of the
```

Paper, reduction or retail or moderact infection, reduction in development of precelempsia and its complications, and ripening of the cervix or induction of labor. A physician has considered the considered as the considered experimental for the considered experimental if based on sound scientific evidence. Adequate and well-controlled studies are difficult to perform during pregnancy. Evidence of widespread use and support from another qualified clinician are methods of justifying off-label prescribing. Each patient is entitled to know why she and her fetus would benefit from the treatment and whether any unnecessary risk is anticipated. Legiple documentation of these discussions in the medical records is important.

L31 ANSWER 22 OF 25 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN ACCESSION NUMBER: 1985088102 EMBASE <<LOGINID::20080306>>

TITLE: Intrauterine fetal demise and hemostatic failure: The fetal

death syndrome.

AUTHOR: Romero R.; Copel J.A.; Hobbins J.C.

```
CORPORATE SOURCE:
                     Yale University School of Medicine, Department of
                     Obstetrics and Gynecology, New Haven, CT 06510, United
                     Clinical Obstetrics and Gynecology, (1985) Vol. 28, No. 1,
                     pp. 24-31.
                      ISSN: 0009-9201 CODEN: COGYAK
                     United States
DOCUMENT TYPE:
                     Journal; Article
FILE SEGMENT:
                              Obstetrics and Gynecology
                              Cardiovascular Diseases and Cardiovascular Surgery
                     025
                              Drug Literature Index
LANGUAGE:
                     English
ENTRY DATE:
                     Entered STN: 10 Dec 1991
                     Last Updated on STN: 10 Dec 1991
     Aggressive management of the patient with a fetal demise has made the
     prolonged retention of a dead fetus a rare cause of coagulopathy in modern
     obstetrics. The availability of ultrasonography and effective means of induction of labor have virtually eliminated the delay in uterine evacuation due to disansotic uncertainty or fear of failure of
      induction. However, all patients with a fetal demise should be
               for coaquiation abnormalities prior to the emptying of the
     uterus. The management of the patient without DIC is straightforward:
     induction of labor with either oxytocin infusion or prostaglandins, in the absence of the usual obstetric contraindications.
     The management of the patient with DIC due to a retained death fetus
     depends on the state of hemostatic compensation and whether or not the
     patient is in labor. If the DIC is either compensated or
     overcompensated,
                        the risk of hemostatic failure is small, and one should
     deliver the dead infant as expeditiously as possible in order to suppress
     the source of the excessive thrombin generation. The duration of the
     pregnancy and the state of <u>cervical</u> ripeness will determine whether oxytocin or prostaglandin preparations should be used for
                  If the patient has decompensated DIC, the management
     objective should be to minimize the risk of peripartum hemorrhage through
     restoration of hemostatic levels of consumed coaquiation factors prior to
     delivery. This can be accomplished by the administration of
     heparin if the patient is not in labor, or by supplying
     the consumed factors with blood component therapy if labor is in
     progress.
L31 ANSWER 23 OF 25 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER:
                     1981095534 EMBASE <<LOGINID::20080306>>
                      [Iatrogenic accidents in obstetrics].
                      LES ACCIDENTS IATROGENES EN OBSTETRIQUE.
                     Magnin P.; Berland M.; Evreux J.C.; et. al.
AUTHOR:
CORPORATE SOURCE:
                     Clin. Obstet., Pav. K, Hop. Edouard Herriot, 69374 Lyon
                     Cedex 2, France
SOURCE:
                     Revue Française de Gynecologie et d'Obstetrique, (1981)
                     Vol. 76, No. 2, pp. 147-166.
ISSN: 0035-290X CODEN: RFGOAO
                     France
DOCUMENT TYPE:
                     Journal
FILE SEGMENT:
                              Obstetrics and Gynecology
                              Drug Literature Index
                     038
                              Adverse Reactions Titles
LANGUAGE:
                     French
SUMMARY LANGUAGE:
                     English
                     Entered STN: 9 Dec 1991
ENTRY DATE:
                     Last Updated on STN: 9 Dec 1991
    Tatrogenic accidents may occur during drug treatment or obstetric
     procedures. Drugs administered to pregnant women have one physiological
     peculiarity: the foetus, mother and placenta form one unit. The most
     important risks are encountered by the foetus. They are various and,
     apart from certain well-known malformations, one should emphasize the
     coagulation disorders induced in the newborn by anticonvulsants administered to the mother during pregnancy. In regard to the maternal
     complications due to drugs, premature labor represents the
     greatest danger, mainly due to the cardiovascular effects of
     sympathomimetic substances. Apart from these drug prescriptions,
     obstetric procedures may cause a certain number of accidents:
```

cervical dystocia after cervical suture, foetal distress after amniocentesis during the third trimester of pregnancy by accidental puncture of a placental or funicular vessel, uterine or cervical rupture or hemorrhagic complications during therapeutic abortion during the second trimester; induction of labor, and perfusion of oxytocin during <u>labor</u>, may cause well-known uterine complications, and recently attention has been drawn to meonatal hyperbilirubinemia favoured by oxytocin. Even obstetric monitoring is not without risks, and cases have been reported of uterine or placental perforation via the catheter used in internal tocography, and foetal injuries due to the scalp electrode. Cesarean section causes a certain number of complications which are becoming increasingly frequent with the increasing number of these operations. Neonatal resuscitation may itself cause certain complications: infection, portal thrombosis, or air embolism after injection of solutions into the umbilical vein; also accidents of severe ischemia due to the accidental injection of hypertonic solutions into the umbilical artery, ocular complications of oxygen in incubators, infective and cardiovascular risks of pharyngeal aspiration. As far as anaesthesia in obstetrics is concerned, a certain number of accidents have been reported due to general anesthesia (maternal bronchopulmonary inhalation, allergy) local anesthesia (epileptic fits, headaches, hypertension), intensive care (pulmonary oedema, hemorrhage after heparin, transfusion accidents due to antibodies). Finally, in a recent paper on maternal mortality in a series of 242 cases, there were 10 deaths attributed to iatrogenic causes.

L31 ANSWER 24 OF 25 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 1993:482571 BIOSIS <<LOGINID::20080306>>

DOCUMENT NUMBER: PREV199396116171

Prevention of fetal loss in experimental antiphospholipid

syndrome by low-molecular-weight heparin.
Inbar, Oded; Blank, Miri; Faden, David; Tincani, Angela;

AUTHOR(S): Lorber, Margalit; Shoenfeld, Yehuda [Reprint author]

CORPORATE SOURCE: Dep. Med. B, Sheba Med. Cent., Tel Hashomer 52621, Israel

American Journal of Obstetrics and Gynecology, (1993) Vol. 169, No. 2 PART 1, pp. 423-426.

CODEN: AJOGAH. ISSN: 0002-9378.

DOCUMENT TYPE: Article

LANGUAGE: English

SOURCE:

ENTRY DATE: Entered STN: 22 Oct 1993 Last Updated on STN: 23 Oct 1993

Objective: The purpose of this study was to compare the effectiveness of low-molecular-weight heparin with regular heparin in the prevention of fetal resorption in mice with the antiphospholipid

syndrome. Study Design: Antiphospholipid syndrome was passively induced in ICR mice by injecting them with anticardiolipin

antibodies on the first day of pregnancy. Subsequently, these mice were

treated with low-molecular-weight hearin in two different doses, with regular heparin and with a placebo. On gestational day 17 the mice were Xilled by cervical dislocation, and the pregnancy outcome was evaluated. Statistical analysis was performed by

means of a one-way analysis of variance using Bonferroni's t test. Results: Treatment with low-molecular-weight heparin resulted in a resorption rate of 22.4% as opposed to 41.4% in mice with antiphospholipid syndrome that were given regular heparin and 51.7% in nontreated controls. Conclusion: We conclude that

low-molecular-weight heparin can prevent fetal resorption in mice with antiphospholipid syndrome.

L31 ANSWER 25 OF 25 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 1982:302709 BIOSIS <<LOGINID::20080306>> PREV198274075189; BA74:75189

EFFECTS OF SEX STEROID HORMONES AND PROSTAGLANDINS ON THE

SYNTHESIS OF GLYCOSAMINO GLYCANS IN CULTURED CELLS FROM THE HUMAN UTERINE CERVIX.

TANAKA M [Reprint author] AUTHOR(S):

CORPORATE SOURCE: DEP OBSTETRICS AND GYNECOL, NAGOYA CITY UNIV MED SCH,

MIZUKO-KU, NAGOYA 467

Nagoya Medical Journal, (1981) Vol. 26, No. 3, pp. 109-123. CODEN: NMJOAA. ISSN: 0027-7649.

## 10500284

DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AMOUAGE:

EXCLISH

To clarify the mechanism of hormonal regulation on the ripening of the uterine cervix during late pregnancy and labor, the effects of sex steroid hormones and prostaglandins (PG) on the synthesis of glycosaminoglycans (GAG) were studied in cultured cells derived from the human uterine cervix. Estradiol-17% (EZ) induces a marked increase in the radioactivity of 14C-glucosamino-incorporated substance, which was ascertained to be mainly hyaluronic acid as identified by Dowex 1-XZ column chromatography and electrophoresis on cellulose acetate membrane. This action of EZ was inhibited by progesterone. PG[prostaglandin]EI, PGE2 and PGF2a had a stimulant effect on the synthesis of CAG, particularly hyaluronic acid.

Sex steroid hormones and PG may contribute to <u>cervical</u> ripening during late pregnancy and <u>labor</u> by increasing the synthesis of

GAG in the <u>cervical</u> tissue.